

Notice of Allowability

Application No.

10/601,327

Examiner

Marjorie Moran

Applicant(s)

OCCHIPINTI ET AL.

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the AF of 2/8/07 and a telephone call on 3/15/07.
2. ☒ The allowed claim(s) is/are 1,5-8,10,12-16, 18-21 and 30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 4/27/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Status of After-final Amendment

The after-final amendment filed 2/8/07 was timely filed and has been entered. After entry of the after-final amendment, claims 1, 2, 5-10, 12-16, 18-37 are pending. In view of the agreement to enter an examiner's amendment (see the Interview Summary), claims 1, 2, 30, and 31 are hereby rejoined with claims 5-10, 12-16 and 18-21.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Rusyn on 4/27/07.

The application has been amended as follows:

Cancel claims 2, 9, 22-29, and 31-37.

Replace claim 1 with the following:

A molecular memory device manufactured according to the method of claim 5.

Claim 7: In line 2, delete the term "a" before "chemical."

Claim 10: In line 1, replace "claim 9" with --claim 5--. In line 2, delete the term "derivative".

Claim 13: In line 1, replace "claim 9" with --claim 5--.

Claim 16: In line 1, replace "claim 3" with --claim 5--.

Claim 18: In line 1, replace "claim 3" with --claim 5--. Also in lines 1-2, delete the phrase "the method further comprises the step of selectively". In line 2, replace "to write" with --writes--.

Claim 19: In line 1, replace "claim 3" with --claim 5--. Also in lines 1-2, delete the phrase "the method further comprises the step of". In line 2, replace "to write" with --writes--.

Claim 30: In line 2, insert "molecular" before "memory" and replace " comprising" with --manufactured according to the method of claim 5.-- Delete lines 3-6.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest a molecular memory device manufactured according to the steps recited in claim 5; and specifically does not teach or suggest contacting first nanoelectrodes to first ends of DNA strands AND contacting nanotubes to second ends of the DNA strands.

It is noted that the claims of US 7,122,461 recite steps similar to those of the instant claims. However, the claims of '461 are directed to manufacture of a semiconductor, not a memory device, and fail to recite any limitation similar to that of hybridizing or not hybridizing of DNA strands *to store desired data in the DNA strands*, thus there is no interference between the claims of '461 and the instant claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 1, 5-8, 10, 12-16, 18-21 and 30 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie Moran whose telephone number is 571-272-0720. The examiner can normally be reached on M-F 6:30 am- 2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marjorie Moran
Primary Examiner
Art Unit 1631

Marjorie A. Moran
4/30/07